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PHOTOGRAPHIC INTERPRETATION REPORT

CHRONOLOGICAL DEVELOPMENT OF AIRFRAME PLANT NO 47 ORENBURG, USSR

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MAY 1967
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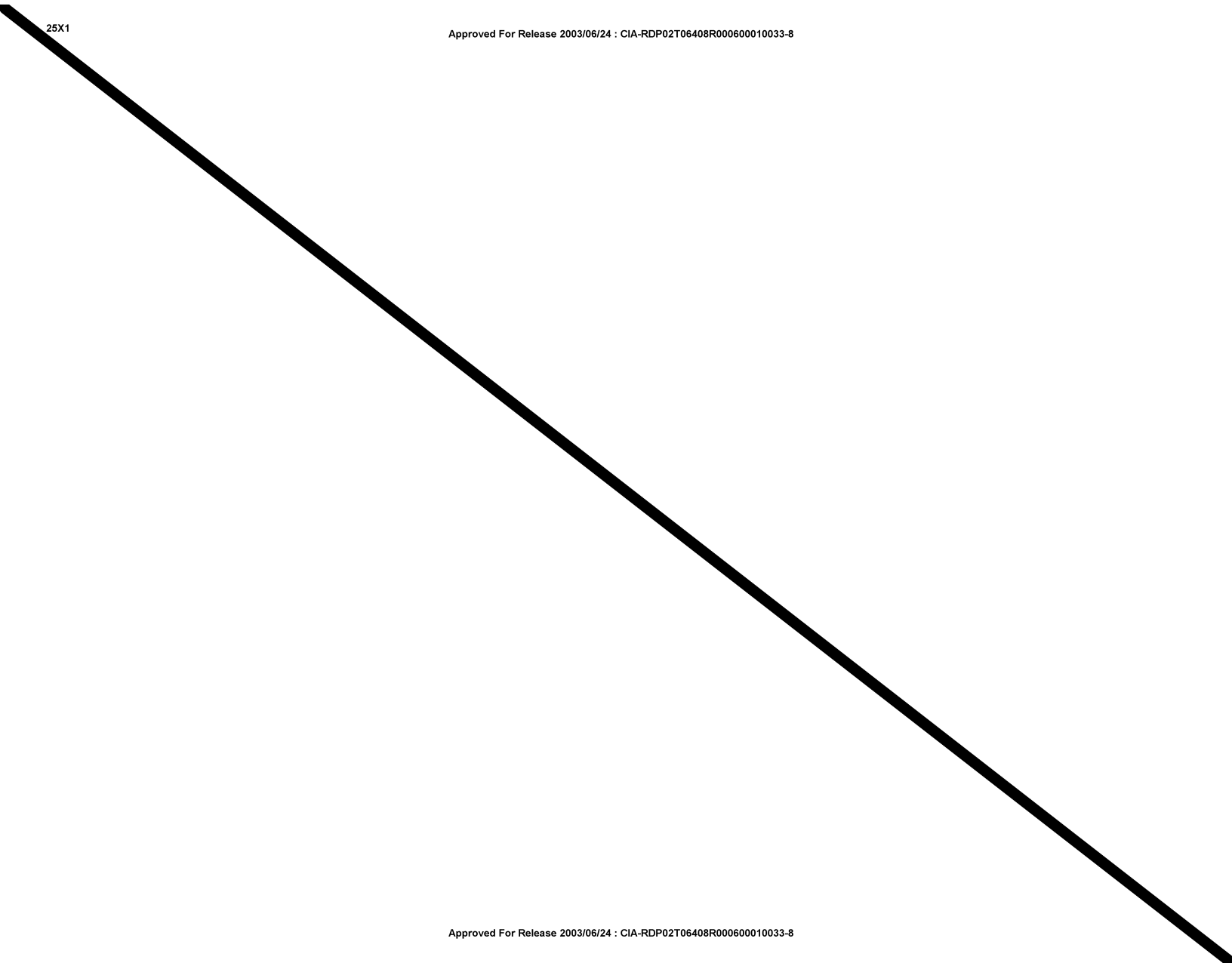


CHRONOLOGICAL DEVELOPMENT OF AIRFRAME PLANT NO 47, ORENBURG, USSR

INTRODUCTION

This report is a study of the chronological development of Airframe Plant No 47 51-48N 55-06E), Orenburg, USSR, based on information compiled from all available photography of the plant through Plant No 47 is located in the northeast suburbs of Orenburg (Figure 1). It is adjacent to the south side of Orenburg Airfield, which has 2 natural-surface runways. Other transportation services include an extensive network of rail spurs, which connect with 2 major rail lines, and a network of good all-weather roads.

Since initial photographic coverage by Mission Plant No 47 (Figures 2-6) has been undergoing a large and apparently well planned construction program. The completion of many new buildings, additions to some of the older buildings, and current construction of 2 large buildings (items 32 and 80) will more than double the plant's original size. 1/

A firm statement as to the present production activities of Airframe Plant No 47 cannot be made, due to inadequate photographic evidence. Aircraft production cannot be confirmed or negated on the basis of either photography. Since the newly constructed facilities are of a type not usually associated with aircraft production, it is possible to conclude that Plant No 47 may not be producing aircraft. Missile production is a very definite probability because of the identification of large numbers of probable cruise-missile shipping crates (see Figure 4 and Table 1). These crates have the same general configuration as cruise-missile shipping crates which have been seen at missile sites in the USSR, Cuba, and China. Their overall measurements also are close to those of previously identified cruise-missile crates. The crates are located near a transshipment building (item 64) and a carpenter shop (item 65). The construction of 2 possible horizontal test buildings (items 25 and 27) and a checkout building (item 3), the presence of long rail cars, and the stringent security measures taken both during and after construction of new facilities suggest an association of the plant with the Soviet missile program.

The building-by-building construction history of the plant is presented graphically in Figure 6 and in tabular form in Table 2, which also provides chronological details and interpretations of the basic functions of all structures in the plant; all item numbers are keyed to Figure 6 and Table 2.

HIGHLIGHTS OF THE DEVELOPMENT OF AIRFRAME PLANT NO 47

1960

Airframe Plant No 47 was first observed on photography of at which time its major facilities consisted of a large assembly building (item 57), a large assembly/shop building (item 56), 3 shop buildings (items 55, 65, and 76), a large foundry (item 36), a transformer yard (item 4), and 2 steamplants (items 31 and 74). Expansion of the plant was evident at this time; footings were visible for a second large assembly building (item 62) and a large transshipment building (item 58). A possible test building (item 25) and a processing building (item 23) were also under construction.

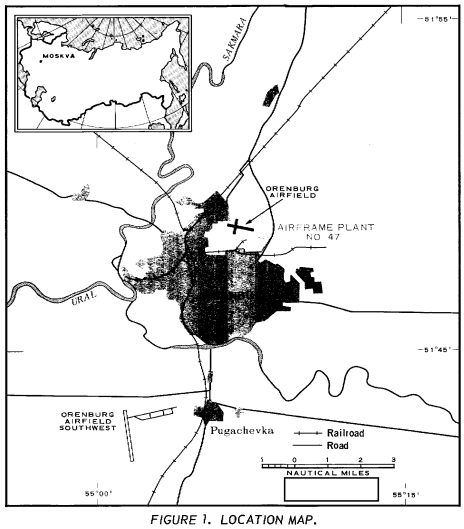


FIGURE 1. LOCATION MAP.

1962

photography of provided the first photographic coverage of Plant No 47 since and revealed continued expansion of facilities. The transshipment building (item 58) had been completed, and some progress had been made on the second large assembly building (item 62). Two small processing buildings (items 5 and 7) were observed under construction. In a warehouse (item 59) was observed under construction. the processing buildings (items 5, 7, and 23) and the possible test building (item 25) were completed.

1963

Significant construction occurring during the year included the completion of a new section joining 2 aircraft hangars to form a single new shop building (item 20), the completion of the second large assembly building (item 62), and the completion of the warehouse (item 59).

1964

Construction activity was relatively light until when a second possible test building (item 27), a second large assembly/shop building (item 28), and a laboratory/administration building (item 29) were first observed under construction. Also at this time it was evident that a new section would be added to the large assembly building first observed in (item 57).

1965

A considerable increase in construction activity was noted during the year. The second possible test building

FIGURE 2. AIRFRAME PLANT NO 47, ORENBURG, USSR,

FIGURE 3. AIRFRAME PLANT NO 47, ORENBURG, USSR

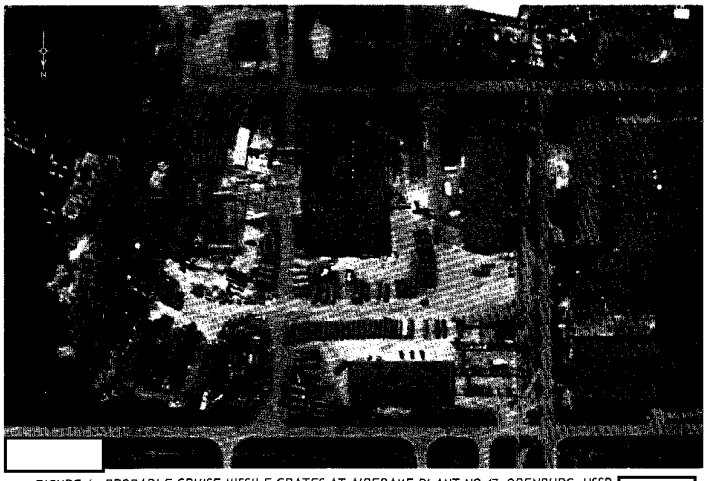
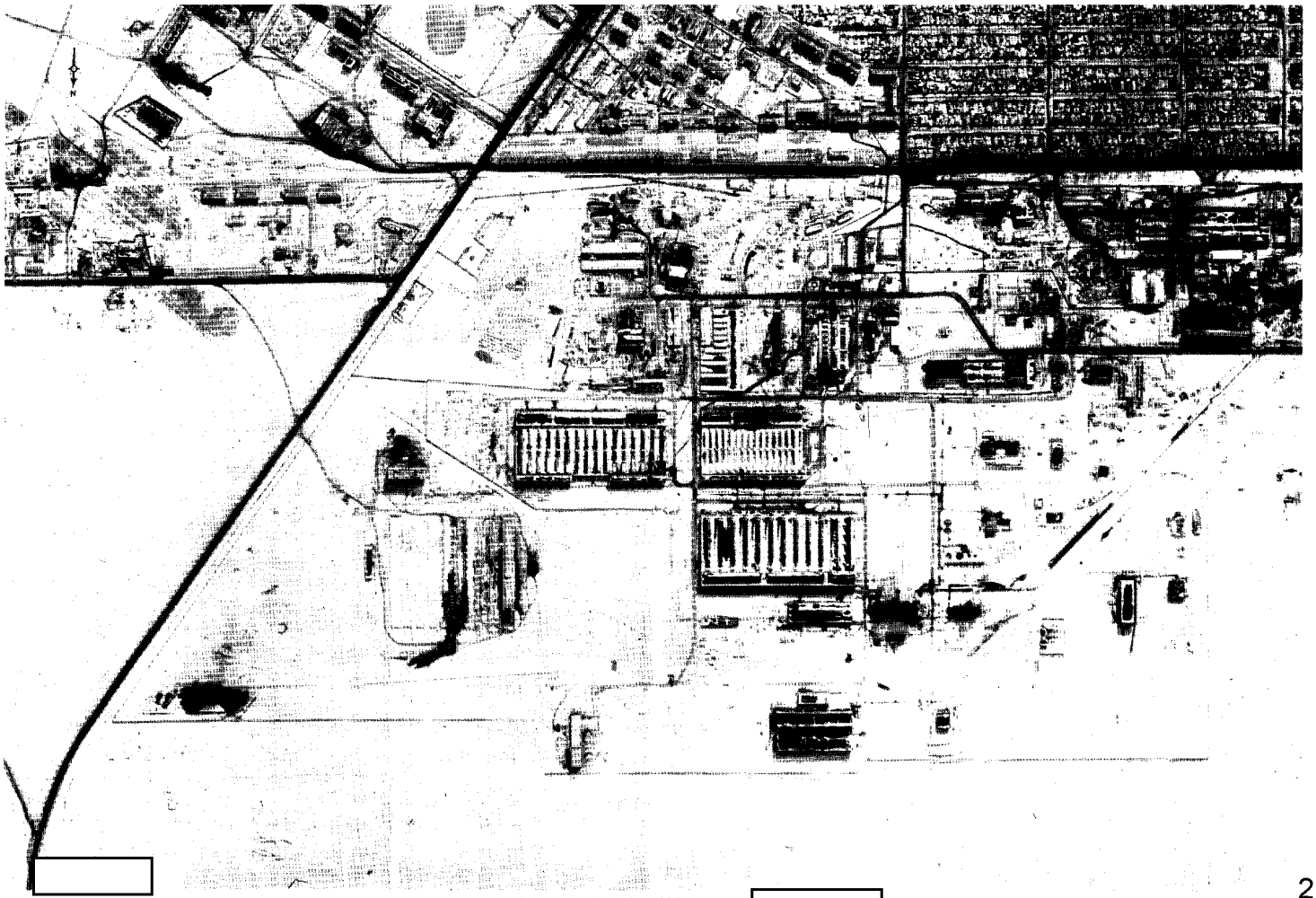


FIGURE 4. PROBABLE CRUISE-MISSILE CRATES AT AIRFRAME PLANT NO 47, ORENBURG, USSR.



25X1 [redacted]

FIGURE 5. AIRFRAME PLANT NO 47, ORENBURG, USSR [redacted] 25X1

Table 2. Data on Facilities of Airframe Plant No 47, Orenburg, USSR
(Item numbers are keyed to Figure 6)

Item No	Probable Function	Dimensions (ft) L	W	H	Roof Cover (sq ft)	Date First Observed	Date Complete	Comments
1	Revetted storage bldg	30	25	---	750			A small bunker is located nearby
2	Special-storage bldg	110	95	---	10,450			Contains 2 small bays each rail served and connected by rail with item 3; equipped with a lightning arrester
3	Checkout bldg	270	85	50	22,950			Served by 5 rail spurs 4 of which pass through the bldg to connect with a rail spur from item 2; equipped with 2 lightning arresters
4	Transformer yard	---	---	---	---			
5	Processing bldg	70	40	---	2,800			Served by a rail spur; equipped with a lightning arrester and a vent/burn-off stack; connected with item 7 by an overhead pipeline
6	Utility shed	40	20	---	800			
7	Processing bldg	165	60	---	9,900			Equipped with a lightning arrester; probably connected by underground pipeline with item 23
8	2 Helicopter pads	---	---	---	---			
9	Open storage area	---	---	---	---			Receiving area for incoming materials; served by rail spur and overhead cranes
10	Hangar	135	125	---	16,875			Probably serves as a shop bldg
11	Administration bldg	70	60	---	4,200			
12	Administration bldg	50	45	---	2,250			
13	2 Utility bldgs	50	45	---	4,500			
14	Utility bldg	105	40	---	4,200			
15	Utility bldg	30	15	---	450			
16	Utility bldg	70	30	---	2,100			
17	Administration bldg	Irregular		---	10,050			
18	Utility bldg	70	30	---	2,100			
19	Utility bldg	70	30	---	2,100			
20	Shop bldg	Irregular		---	86,875			Bldg expanded between [redacted] [redacted]
21	Utility bldg	45	45	---	2,025			
22	Utility bldg	70	30	---	2,100			
23	Processing bldg	Irregular		---	13,200			Partially revetted; equipped with a lightning arrester and 2 vent/burn-off stacks
24	Fuel storage area	---	---	---	---			Consists of at least 5 underground storage tanks served by 6 rail offloading points and a pumphouse; a lightning arrester is also located in this area
25	Possible test bldg	Irregular		---	4,225			Possibly contains 3 small horizontal test cells
26	Steamplant	160	40	---	6,400			
27	Possible test bldg	100	75	---	7,500			Possibly contains 2 small horizontal test cells
28	Assembly/shop bldg	480	235	55	112,800			
29	Laboratory/administration bldg	[redacted]			12,000			Connected with item 28 by a covered walkway
30	Revetted storage bldg	30	20	---	600			
31	Steamplant	Irregular		---	17,500			
32	Large bldg u/c	---	---	---	---			
33	Utility bldg	40	25	---	1,000			
34	Utility bldg	30	20	---	600			
35	2 Utility bldgs	40	20	---	1,600			
36	Foundry	Irregular		---	83,825			
37	Shop bldg	Irregular		---	13,400			
38	Shop bldg	115	60	---	6,900			
39	Hangar	120	105	---	12,600			Probably serves as a shop bldg
40	Administration bldg	Irregular		---	7,225			
41	Administration bldg	Irregular		---	11,150			
42	Shop bldg	100	70	---	7,000			
43	Warehouse	100	35	---	3,500			
44	Warehouse	100	35	---	3,500			
45	Warehouse	100	45	---	4,500			
46	Warehouse	100	35	---	3,500			
47	Warehouse	100	35	---	3,500			
48	Warehouse	100	35	---	3,500			
49	Warehouse	100	35	---	3,500			
50	Pumphouse	65	30	---	1,950			Serves 2 underground water tanks
51	2 Utility bldgs	40	25	---	2,000			
52	Foundry	Irregular		---	23,500			
53	Utility bldg	40	40	---	1,600			
54	Utility bldg	20	20	---	400			
55	Shop bldg	Irregular		---	119,345			Rail served
56	Assembly/shop bldg	645	430	55	277,350			Served by a rail spur which enters the west side of the bldg
57	Assembly bldg	Irregular		---	445,700			New section added between Sep [redacted] bldg is served by 2 rail spurs one of which enters bldg
58	Transshipment bldg	400	115	---	46,000			Rail served and served by an overhead crane
59	Warehouse	240	40	---	9,600			Rail served
60	2 Utility bldgs	100	35	---	7,000			Probably temporary construction bldgs
61	Shop bldg	330	55	---	18,150			
62	Assembly bldg	Irregular		---	398,825			
63	Shop bldg	200	70	---	14,000			Rail served and served by an overhead crane
64	Transshipment bldg	240	80	---	19,200			Rail served
65	Shop bldg	220	165	---	36,300			Carpenter shop for building the shipping crates; new section added between [redacted] [redacted]
66	Spray pond	---	---	---	---			Connected with item 63 (shop bldg)
67	Warehouse	100	40	---	4,000			
68	Shop bldg	95	60	---	5,700			
69	Warehouse	100	40	---	4,000			
70	Utility bldg	Irregular		---	2,700			
71	Utility bldg	60	55	---	3,300			
72	Warehouse	120	65	---	7,800			Served by an overhead crane system; rail served
73	Utility bldg	100	30	---	3,000			
74	Steamplant	200	80	---	16,000			Doubled in size between [redacted] [redacted] rail served
75	Utility bldg	100	35	---	3,500			
76	Shop bldg	Irregular		---	70,600			
77	Utility bldg	40	20	---	800			Probably temporary construction bldg
78	Laboratory/engineering bldg	240	60	---	14,400			
79	Warehouse	200	40	---	8,000			
80	Large bldg u/c	---	---	---	---			
81	Control point	---	---	---	---			

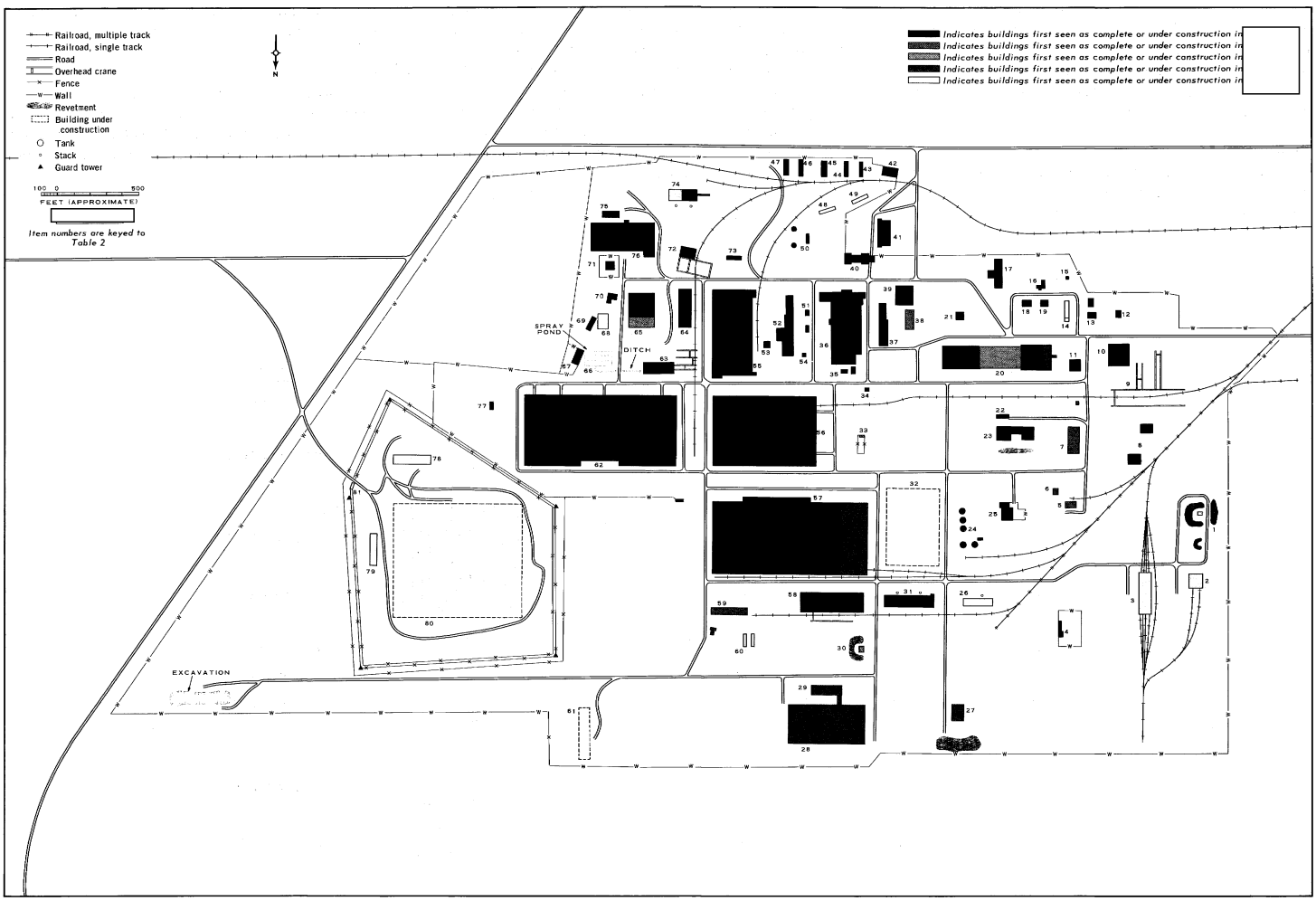


FIGURE 6. LAYOUT OF AIRFRAME PLANT NO 47.

25X1 (item 27) was completed by [redacted] and a small revetted storage building (item 1), a special-storage building (item 2), a checkout building (item 3), and a small steamplant (item 26) were observed under construction. A laboratory/engineering building (item 78) and a very large building (item 80) were 25X1 in a very early stage of construction in [redacted] 25X1

1966

During the year, construction activity continued to increase. The small revetted storage building (item 1) and the new section of the large assembly building (item 57) were completed in [redacted] The small steamplant (item 26), the second large assembly/shop building (item 28), and the laboratory/administration building (item 29) were complete as of [redacted] At this same time a shop building (item 61), a spray pond (item 66), and a warehouse (item 79) were observed under construction. In [redacted] footings for a new large building (item 32) were first noted. Also by [redacted] the construction of the very large building (item 80) had become highly sensitive; the building site had been completely enclosed by a triple security fence, and guard towers had been placed at regular intervals along the innermost fence. The special-storage building (item 2) and the checkout building (item 3) were completed by [redacted] 25X1

1967

By [redacted] additional construction consisted of 25X1 the completion of the warehouse (item 79) and the laboratory/ 25X1 engineering building (item 78) and continued progress on 25X1 structures previously mentioned as under construction.

[redacted] 25X1

25X1 [redacted]

MAPS OR CHARTS

ACIC series, scale 1:200,000

DOCUMENTS

1. NPIC. [redacted] *Airframe Plant No 47, Orenburg, USSR*, Mar 67 (TOP SECRET [redacted]
NPIC. [redacted] *Airframe Plant No 47, Orenburg, USSR*, Oct 66 (TOP SECRET [redacted]

25X1 25X1

REQUIREMENT

CIA. C-DI5-82,973

NPIC PROJECT

11212/66 (partial answer)

[redacted] 25X1 25X1

Approved For Release 2003/06/24 : CIA-RDP02T06408R000600010033-8